



STEVAL-IFS017V1

Multiple-device temperature sensor and RTC demonstration board based on the STM32

Data brief

Features

- Multiple device temperature sensor
- USB powered
- RoHS compliant

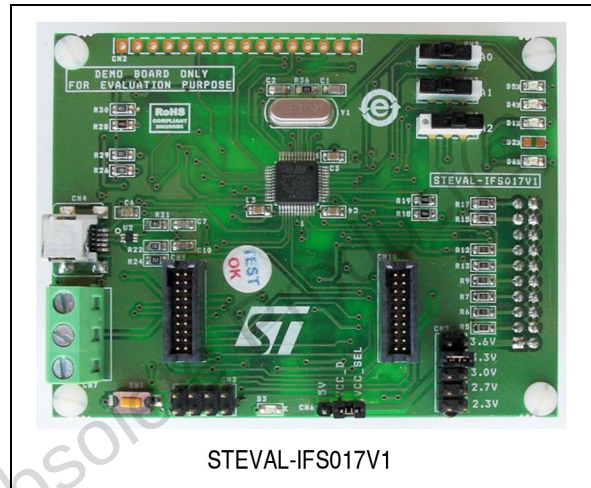
Description

The STEVAL-IFS017V1 demonstration board provides an evaluation platform for testing multiple temperature sensor and real-time clock (RTC) ICs from STMicroelectronics. The STEVAL-IFS017V1 acts as a motherboard based on the STM32 microcontroller, to which different daughter cards with temperature sensors and RTCs can be connected.

The temperature sensors supported by this system are: the STLM20, STTS424E02, STTS75, STDS75, STLM75, STCN75, STTS751, and STTS2002.

RTCs supported by this system are: the M41T82SM6, M41T83SQA6, M41T83SMY6.

The STEVAL-IFS017V1 demonstration board can operate in USB powered mode with a graphical user interface (GUI). The graphical user interface is used to access the registers and demonstrate the features of temperature sensors and RTCs.



STEVAL-IFS017V1

Figure 1. Schematic diagram (part 1)

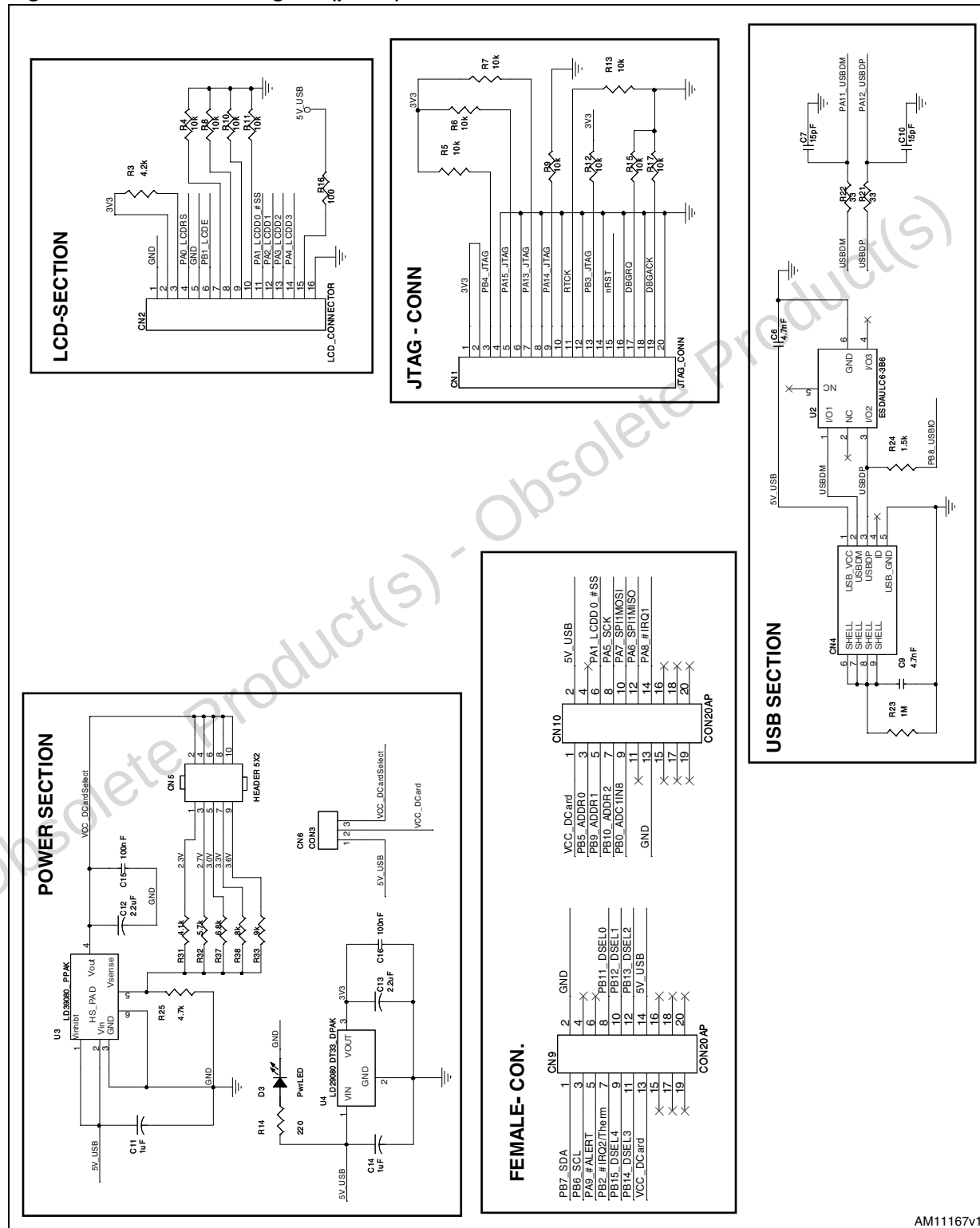
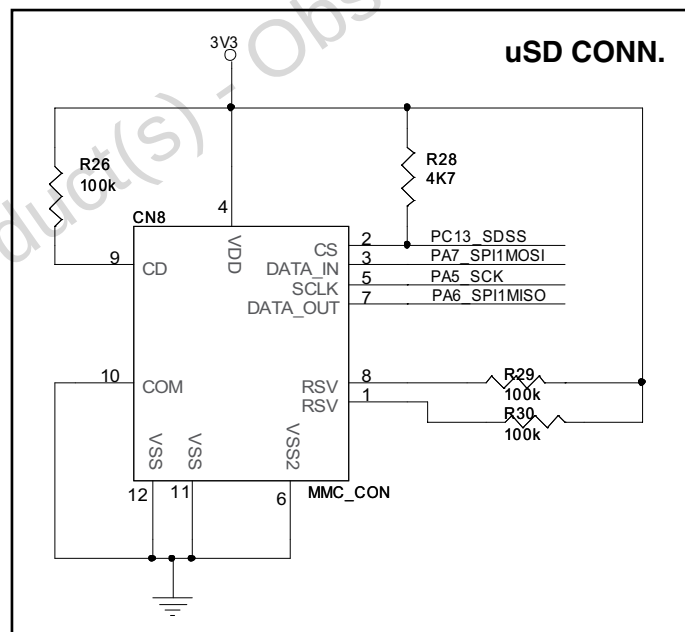
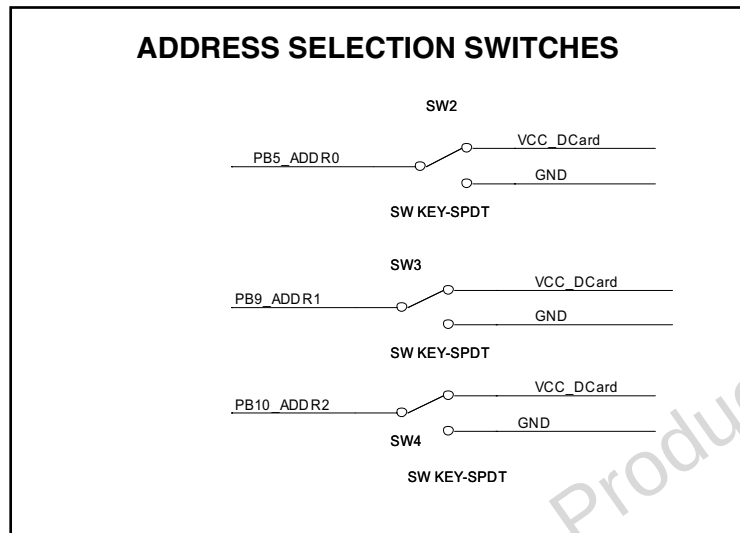


Figure 2. Schematic diagram (part 2)



AM11168v1

MICROCONTROLLER-SECTION

The schematic diagram illustrates the microcontroller section of the AM12011v1. The central component is the STM32F102C8T6 microcontroller. The diagram shows the following connections and components:

- Power Supply:** The microcontroller is powered by a 3V3 supply. Power pins include VDD_2, VDD_1, VDD_3, VDD_4, VDD_5, VDD_6, VDD_7, VDD_8, VDD_9, VDD_10, VDD_11, VDD_12, VDD_13, VDD_14, VDD_15, VDD_16, VDD_17, VDD_18, VDD_19, VDD_20, VDD_21, VDD_22, VDD_23, VDD_24, VDD_25, VDD_26, VDD_27, VDD_28, VDD_29, VDD_30, VDD_31, VDD_32, VDD_33, VDD_34, VDD_35, VDD_36, VDD_37, VDD_38, VDD_39, VDD_40, VDD_41, VDD_42, VDD_43, VDD_44, VDD_45, VDD_46, VDD_47, VDD_48, VDD_49, VDD_50, VDD_51, VDD_52, VDD_53, VDD_54, VDD_55, VDD_56, VDD_57, VDD_58, VDD_59, VDD_60, VDD_61, VDD_62, VDD_63, VDD_64, VDD_65, VDD_66, VDD_67, VDD_68, VDD_69, VDD_70, VDD_71, VDD_72, VDD_73, VDD_74, VDD_75, VDD_76, VDD_77, VDD_78, VDD_79, VDD_80, VDD_81, VDD_82, VDD_83, VDD_84, VDD_85, VDD_86, VDD_87, VDD_88, VDD_89, VDD_90, VDD_91, VDD_92, VDD_93, VDD_94, VDD_95, VDD_96, VDD_97, VDD_98, VDD_99, VDD_100, VDD_101, VDD_102, VDD_103, VDD_104, VDD_105, VDD_106, VDD_107, VDD_108, VDD_109, VDD_110, VDD_111, VDD_112, VDD_113, VDD_114, VDD_115, VDD_116, VDD_117, VDD_118, VDD_119, VDD_120, VDD_121, VDD_122, VDD_123, VDD_124, VDD_125, VDD_126, VDD_127, VDD_128, VDD_129, VDD_130, VDD_131, VDD_132, VDD_133, VDD_134, VDD_135, VDD_136, VDD_137, VDD_138, VDD_139, VDD_140, VDD_141, VDD_142, VDD_143, VDD_144, VDD_145, VDD_146, VDD_147, VDD_148, VDD_149, VDD_150, VDD_151, VDD_152, VDD_153, VDD_154, VDD_155, VDD_156, VDD_157, VDD_158, VDD_159, VDD_160, VDD_161, VDD_162, VDD_163, VDD_164, VDD_165, VDD_166, VDD_167, VDD_168, VDD_169, VDD_170, VDD_171, VDD_172, VDD_173, VDD_174, VDD_175, VDD_176, VDD_177, VDD_178, VDD_179, VDD_180, VDD_181, VDD_182, VDD_183, VDD_184, VDD_185, VDD_186, VDD_187, VDD_188, VDD_189, VDD_190, VDD_191, VDD_192, VDD_193, VDD_194, VDD_195, VDD_196, VDD_197, VDD_198, VDD_199, VDD_200, VDD_201, VDD_202, VDD_203, VDD_204, VDD_205, VDD_206, VDD_207, VDD_208, VDD_209, VDD_210, VDD_211, VDD_212, VDD_213, VDD_214, VDD_215, VDD_216, VDD_217, VDD_218, VDD_219, VDD_220, VDD_221, VDD_222, VDD_223, VDD_224, VDD_225, VDD_226, VDD_227, VDD_228, VDD_229, VDD_230, VDD_231, VDD_232, VDD_233, VDD_234, VDD_235, VDD_236, VDD_237, VDD_238, VDD_239, VDD_240, VDD_241, VDD_242, VDD_243, VDD_244, VDD_245, VDD_246, VDD_247, VDD_248, VDD_249, VDD_250, VDD_251, VDD_252, VDD_253, VDD_254, VDD_255, VDD_256, VDD_257, VDD_258, VDD_259, VDD_260, VDD_261, VDD_262, VDD_263, VDD_264, VDD_265, VDD_266, VDD_267, VDD_268, VDD_269, VDD_270, VDD_271, VDD_272, VDD_273, VDD_274, VDD_275, VDD_276, VDD_277, VDD_278, VDD_279, VDD_280, VDD_281, VDD_282, VDD_283, VDD_284, VDD_285, VDD_286, VDD_287, VDD_288, VDD_289, VDD_290, VDD_291, VDD_292, VDD_293, VDD_294, VDD_295, VDD_296, VDD_297, VDD_298, VDD_299, VDD_300, VDD_301, VDD_302, VDD_303, VDD_304, VDD_305, VDD_306, VDD_307, VDD_308, VDD_309, VDD_310, VDD_311, VDD_312, VDD_313, VDD_314, VDD_315, VDD_316, VDD_317, VDD_318, VDD_319, VDD_320, VDD_321, VDD_322, VDD_323, VDD_324, VDD_325, VDD_326, VDD_327, VDD_328, VDD_329, VDD_330, VDD_331, VDD_332, VDD_333, VDD_334, VDD_335, VDD_336, VDD_337, VDD_338, VDD_339, VDD_340, VDD_341, VDD_342, VDD_343, VDD_344, VDD_345, VDD_346, VDD_347, VDD_348, VDD_349, VDD_350, VDD_351, VDD_352, VDD_353, VDD_354, VDD_355, VDD_356, VDD_357, VDD_358, VDD_359, VDD_360, VDD_361, VDD_362, VDD_363, VDD_364, VDD_365, VDD_366, VDD_367, VDD_368, VDD_369, VDD_370, VDD_371, VDD_372, VDD_373, VDD_374, VDD_375, VDD_376, VDD_377, VDD_378, VDD_379, VDD_380, VDD_381, VDD_382, VDD_383, VDD_384, VDD_385, VDD_386, VDD_387, VDD_388, VDD_389, VDD_390, VDD_391, VDD_392, VDD_393, VDD_394, VDD_395, VDD_396, VDD_397, VDD_398, VDD_399, VDD_400, VDD_401, VDD_402, VDD_403, VDD_404, VDD_405, VDD_406, VDD_407, VDD_408, VDD_409, VDD_410, VDD_411, VDD_412, VDD_413, VDD_414, VDD_415, VDD_416, VDD_417, VDD_418, VDD_419, VDD_420, VDD_421, VDD_422, VDD_423, VDD_424, VDD_425, VDD_426, VDD_427, VDD_428, VDD_429, VDD_430, VDD_431, VDD_432, VDD_433, VDD_434, VDD_435, VDD_436, VDD_437, VDD_438, VDD_439, VDD_440, VDD_441, VDD_442, VDD_443, VDD_444, VDD_445, VDD_446, VDD_447, VDD_448, VDD_449, VDD_450, VDD_451, VDD_452, VDD_453, VDD_454, VDD_455, VDD_456, VDD_457, VDD_458, VDD_459, VDD_460, VDD_461, VDD_462, VDD_463, VDD_464, VDD_465, VDD_466, VDD_467, VDD_468, VDD_469, VDD_470, VDD_471, VDD_472, VDD_473, VDD_474, VDD_475, VDD_476, VDD_477, VDD_478, VDD_479, VDD_480, VDD_481, VDD_482, VDD_483, VDD_484, VDD_485, VDD_486, VDD_487, VDD_488, VDD_489, VDD_490, VDD_491, VDD_492, VDD_493, VDD_494, VDD_495, VDD_496, VDD_497, VDD_498, VDD_499, VDD_500, VDD_501, VDD_502, VDD_503, VDD_504, VDD_505, VDD_506, VDD_507, VDD_508, VDD_509, VDD_510, VDD_511, VDD_512, VDD_513, VDD_514, VDD_515, VDD_516, VDD_517, VDD_518, VDD_519, VDD_520, VDD_521, VDD_522, VDD_523, VDD_524, VDD_525, VDD_526, VDD_527, VDD_528, VDD_529, VDD_530, VDD_531, VDD_532, VDD_533, VDD_534, VDD_535, VDD_536, VDD_537, VDD_538, VDD_539, VDD_540, VDD_541, VDD_542, VDD_543, VDD_544, VDD_545, VDD_546, VDD_547, VDD_548, VDD_549, VDD_550, VDD_551, VDD_552, VDD_553, VDD_554, VDD_555, VDD_556, VDD_557, VDD_558, VDD_5

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
21-Feb-2012	1	Initial release.

Obsolete Product(s) - Obsolete Product(s)

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